[4910-13-P]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2012-0014; Directorate Identifier 2011-CE-044-AD; Amendment

39-16915; AD 2011-27-51]

**RIN 2120-AA64** 

Airworthiness Directives; Hawker Beechcraft Corporation Models 1900, 1900C, and 1900D Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Hawker Beechcraft Corporation Models 1900, 1900C, and 1900D airplanes. This emergency AD was sent previously to all known U.S. owners and operators of these airplanes. This AD requires inspecting the elevator bob-weight and attaching linkage for correct installation and for damage or deformation to the weight and/or weight bracket with corrective action as necessary. This AD was prompted by reports of the elevator bob-weight (stabilizer weight) traveling past its stop bolt, which allowed the attaching linkage to move overcenter, resulting in reduced nose down elevator control, which could result in loss of control of the airplane. We are issuing this AD to detect and correct conditions that could result in reduced nose down elevator control and loss of control of the airplane.

**DATES:** This AD is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-27-51, issued on December 23, 2011, which contained the requirements of this amendment.

The Director of the Federal Register approved the incorporation by reference of a certain publication identified in the AD as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Hawker Beechcraft Corporation at P.O. Box 85, Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or (316) 676-3140; Internet: http://pubs.hawkerbeechcraft.com.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT ONE OF THE FOLLOWING:

- Paul DeVore, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4142; fax: (316) 946-4107; email: paul.devore@faa.gov; or
- Don Ristow, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4120; fax: (316) 946-4107; email: donald.ristow@faa.gov.

### SUPPLEMENTARY INFORMATION:

### **Discussion**

On December 23, 2011, we issued Emergency AD 2011-27-51, which requires inspecting the elevator bob-weight and attaching linkage for correct installation and for damage or deformation to the weight and/or weight bracket with corrective action as necessary. This AD was prompted by the following reports of the elevator bob-weight (stabilizer weight) traveling past its stop bolt, which allowed the attaching linkage to move over-center, reducing nose down elevator control.

In one instance, a Model 1900C airplane experienced jammed elevators on takeoff after a loud bang was heard in the cockpit shortly after rotation. The flight crew
noticed that they were unable to move the control column to a nose down position.

Elevator movement was only available between neutral to full deflection nose up. The
airplane pitch was controlled with the elevator trim and the airplane returned to base,
landing safely. Upon inspection, mechanics noticed that the bob-weight interconnect link,
part number (p/n) 101-524112-1, was upside down and trailing forward from the control
column weld assembly instead of trailing aft as it should. With the link traveled overcenter, the geometry of the bob-weight was completely changed relative to its stop. This
condition made the bob-weight hit its stop mid-travel, where it should actually have

positive clearance from its stop at the full nose down position. The elevator could now only move between nose full up and neutral.

In another instance, on a Model 1900D airplane, during the takeoff roll the elevator controls felt heavy and appeared to be jammed/sticking, requiring more force than usual to rotate. The crew then aborted the takeoff run. Subsequent investigation revealed that the elevator bob-weight attaching link assembly traveled over-center, thus preventing full nose down elevator control authority.

The Model 1900 airplanes have the same type design and thus are subject to this unsafe condition.

This condition, if not corrected, could result in reduced nose down elevator control and loss of airplane control.

#### **Relevant Service Information**

We reviewed Hawker Beechcraft Corporation Safety Communiqué #321, dated December 2011. The service information provides information to assist in doing the actions of this AD.

#### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

## **AD Requirements**

This AD requires inspecting the elevator bob-weight and attaching linkage for correct installation and for damage or deformation to the weight and/or weight bracket with corrective action as necessary.

#### Interim Action

We consider this AD interim action to address the immediate unsafe condition affecting these airplanes. We may take further AD action at a later date.

### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the elevator stabilizer weight (bob-weight) could move over-center resulting in reduced nose down elevator control, which could result in loss of control of the airplane. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2012-0014 and Directorate Identifier 2011-CE-044-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

## **Costs of Compliance**

We estimate that this AD affects 300 airplanes.

We estimate the following costs to comply with this AD:

### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of the elevator bob-weight and attaching linkage	1 work-hour X \$85 per hour = \$85	Not applicable	\$85	\$25,500

The on-condition costs for any corrective action that may be necessary based on the above inspection would vary from airplane to airplane, and we have no way of determining that cost.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2011-27-51 Hawker Beechcraft Corporation**: Amendment 39-16915; Docket No. FAA-2012-0014; Directorate Identifier 2011-CE-044-AD.

## (a) Effective Date

This AD is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-27-51, issued on December 23, 2011, which contained the requirements of this amendment.

## (b) Affected ADs

None.

## (c) Applicability

This AD applies to the following Hawker Beechcraft Corporation airplanes, certificated in any category:

	Models	Serial Numbers
(1)	1900	UA-3
(2)	1900C	UB-1 through UB-74 and UC-1 through UC-174
(3)	1900C (Military)	UD-1 through UD-6
(4)	1900D	UE-1 through UE-439

## (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 27, Flight Controls.

# (e) Unsafe Condition

This AD was prompted by reports of the elevator bob-weight (stabilizer weight) traveling past its stop bolt, which allowed the attaching linkage to move over-center. We are issuing this AD to detect and correct conditions that could result in reduced nose down elevator control and loss of control of the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Inspections

Within the next 10 hours time-in-service after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), inspect the elevator bob-weight installation for the following conditions. Use Hawker Beechcraft Corporation Safety Communiqué #321, dated December 2011.

NOTE: The term "nose down" corresponds to the airplane nose down, down elevator, and control column forward position as used in this AD and Hawker Beechcraft Corporation Safety Communiqué # 321, dated December 2011.

- (1) The correct positioning of the elevator control column link assembly, (part number (P/N) 101-524112-1 (1900/1900C) or P/N 101-524112-5 (1900D)). With the elevator control column in the full nose down position (control column forward), the link must form an angle between the link attachment point at the control column and the bell crank pivot point as shown in the Hawker Beechcraft Corporation Safety Communiqué photo labeled "Correct Link Orientation." The link should be trailing aft from the control column assembly.
- (2) The clearance of the bob-weight stop bolt. With the elevator control column in the full nose down position (control column forward), the stabilizer weight stop bolt must have positive clearance with the face of the stabilizer weight.
- (3) The condition of the bob-weight and alignment with the stop bolt. Inspect for evidence of scraping along either side of the weight by the stop bolt. With side pressure applied by hand to the stabilizer weight, no part of the stop bolt should protrude beyond the face of the stabilizer weight on either edge.
- (4) <u>The condition of the bob-weight support bracket</u>. Inspect for evidence of damage or deformation by contact with the weight assembly.

### (h) Corrective Actions

If any discrepancies are found in the inspections required in paragraph (g) of this AD, before further flight, do the following:

- (1) Contact Hawker Beechcraft Corporation Technical Support by telephone at (800) 429-5372 or (316) 676-3140 to obtain FAA-approved repair or replacement instructions.
- (2) Incorporate the repair or replacement specified in the FAA-approved instructions.

# (i) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

## (i) Related Information

For more information about this AD, contact one of the following:

- (i) Paul DeVore, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4142; fax: (316) 946-4107; email: paul.devore@faa.gov; or
- (ii) Don Ristow, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4120; fax: (316) 946-4107; email: donald.ristow@faa.gov.

(k) Material Incorporated by Reference

(1) You must use Hawker Beechcraft Corporation Safety Communiqué #321,

dated December 2011, to do the actions required by this AD, unless the AD specifies

otherwise. The Safety Communiqué #321 references Hawker Beechcraft Corporation

Mandatory Service Bulletin 27-3739, but that service bulletin is not required to do the

actions of this AD. The Director of the Federal Register approved the incorporation by

reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Hawker Beechcraft

Corporation at P.O. Box 85, Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or

(316) 676-3140; Internet: http://pubs.hawkerbeechcraft.com.

(3) You may review copies of the service information at the FAA, Small Airplane

Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability

of this material at the FAA, call (816) 329-4148.

(4) You may also review copies of the service information that is incorporated by

reference at the National Archives and Records Administration (NARA). For information

on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr locations.html.

Issued in Kansas City, Missouri on January 6, 2012.

Earl Lawrence,

Manager, Small Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2012-604 Filed 01/17/2012 at 8:45 am; Publication Date: 01/18/2012]

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